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ATTACHMENT "A"

MARKED-UP VERSION OF SUBSTITUTE SPECIFICATION

UNDER 37 C.F.R. § 1.125

~~—[Document Name]—~~ Specification~~—[Title of the Invention]—~~ Shape Retentive Clothing~~—[The technical field to which the invention belongs]—~~RELATED APPLICATIONS

[0001] The present application claims the benefit of priority under 35 U.S.C. 119(e) of International Application no. PCT/JP/2005/012868, filed July 12, 2005, Japanese Application no. JP 2005000094080, filed March 29, 2005, Japanese Application no. JP 2005000094079, filed March 29, 2005 and Japanese Application no. JP 2004000208966, filed July 15, 2004. The disclosures of the above referenced applications are hereby fully incorporated by reference.

FIELD OF THE INVENTION~~—[0001]—~~

[0002] The present invention relates to a structure for forming and maintaining the three-dimensional shape of clothing.

~~—[Description of the Prior Art]—~~~~—[0002]—~~

BACKGROUND

[0003] Some lingerie has shape retentive ~~shape-memory~~ wire so as to stabilize the shape of the lingerie or to adjust the lingerie to the form of one's body. The use of shape retentive wire ~~Construction stabilizing or keeping shapes~~ is known not only in the field of lingerie but also in the fields of clothing and accessory accessories.

~~—[0003]—~~

[0004] For example, with regard to ~~[[an]]~~ art described in the Japanese Patent Laid Open Gazette 2000-314023, the clothing described in said patent reference has a neck collar part which covers the ears and ~~[[the]]~~ back of the head, wherein the neck collar part ~~[[is]]~~ contains inserted ~~shape-memory~~ shape retentive alloy wires or metal wires so as to keep the neck collar part standing.

[0005] With regard to ~~[[an]]~~ art described in the Japanese Utility Model 3089123, wires of shape ~~memory~~ retentive alloy or metal wires are attached to the inside of a muffler as a shape retention member. Accordingly, the three-dimensional shape of the muffler can be changed freely and the desired shape can be kept, thereby improving the ~~value~~ functionality of the overall design.

~~—[Summary of the Invention]—~~

~~—[Problems to Be Solved by the Invention]—~~

~~—[0004]—~~

[0006] ~~Especially,~~ [[w]]With regard to clothing formed from relatively soft material

such as knit, it is difficult to form ~~[[the]]~~ a three-dimensional shape of the clothing and keep ~~[[the]]~~ such shape while maintaining the ~~feeling~~ original qualities of the material. For example, with regard to ~~[[the]]~~ clothing formed from relatively soft material such as knit, the neck collar part can be turned up or rolled down, but it is difficult to keep the turned up or rolled down shape because of the characteristics of the material, namely its softness and lack of rigidity.

[0007] Then, the present invention suggests construction of shape retentive clothing whose three-dimensional shape can be changed freely and kept in place securely even if the clothing is constructed ~~[[by]]~~ from soft material such as knit.

~~—[Means for Solving the Problems]—~~

~~—[0005]—~~

SUMMARY OF THE INVENTION

[0008] The above-mentioned problems are solved by the following means according to the present invention.

~~—[0006]—~~

[0009] ~~As specified in claim 1,~~ In one embodiment of the present invention a member which is ~~transformable~~ flexible and able to maintain ~~maintainable~~ its shape is attached to the clothing.

~~—[0007]—~~

[0010] In another embodiment of the present invention ~~As specified in claim 2,~~ a member which is ~~transformable~~ flexible and able to maintain ~~maintainable~~ its shape is attached

to a body, a sleeve, a cuff, a neck or a pocket of the clothing.

~~—{0008}—~~

[0011] In another embodiment of the present invention ~~As specified in claim 3,~~ a resin wire and/or a ceramic wire are used as ~~[[the]]~~ a member which is flexible transformable and able to maintain maintainable its shape.

~~—{0009}—~~

[0012] In another embodiment of the present invention ~~As specified in claim 4,~~ an end of the resin wire or the ceramic wire comprising the flexible and shape retentive member is turned up and covered by a cylindrical member.

~~—{Effect of the Invention}—~~

~~—{0010}—~~

BRIEF DESCRIPTION OF THE DRAWINGS

[0013] Figure 1 is a drawing of a shirt having a neck collar.

[0014] Figure 2 is a drawing demonstrating the arrangement of wires attached to the shirt having a neck collar.

[0015] Figure 3 is a drawing of a T-shirt.

[0016] Figure 4 is a drawing demonstrating the arrangement of wires attached to the T-shirt.

[0017] Figure 5 is a drawing demonstrating the construction of a border line.

[0018] Figure 6 is a drawing of a shape retentive wire, wherein the end of said wire is

turned up and covered by a cylindrical member.

[0019] Figure 7 is a drawing demonstrating one embodiment of the present invention, wherein a shape retentive wire is attached to the clothing.

[0020] Figure 8 is a side view drawing demonstrating one embodiment of the present invention, wherein a shape retentive wire is attached to the clothing.

[0021] Figure 9a is a drawing demonstrating a neck collar in the down position where the shape retentive wire is attached to said neck collar.

[0022] Figure 9b is a drawing demonstrating a neck collar in the upward position where the shape retentive wire is attached to said neck collar.

[0023] Figure 10a is a drawing demonstrating a closed pocket to which the shape retentive wire is attached.

[0024] Figure 10b is a drawing demonstrating an open pocket to which the shape retentive wire is attached.

[0025] Figure 11a is a drawing demonstrating a sleeve in the unrolled position to which the shape retentive wire is attached.

[0026] Figure 11b is a drawing demonstrating a sleeve in the rolled up position to which the shape retentive wire is attached.

[0027] Figure 12a is a drawing demonstrating trousers with the trouser legs in the unrolled position to which the shape retentive wire is attached.

[0028] Figure 12b is a drawing demonstrating trousers with the trouser legs rolled up to

which the shape retentive wire is attached.

DETAILED DESCRIPTION OF THE INVENTION

[0029] Numbering reference list:

10 a shirt

11 a body

12 a sleeve

13 a neck

14 a neck hole

15 a pocket

20 a wire

21 a tube

[0030] ~~According to claim 1, the~~ The present invention constructed as [[the]] above brings the following effects. The clothing can be formed three-dimensionally and kept in the desired shape even if the clothing is constructed [[by]] from soft cloth which does not maintain is ~~hardly to retain~~ its shape easily. When the clothing gets out of shape once, the clothing can be formed back into desired shape easily. ~~again easily so as to form fine state.~~

~~—[0012]—~~

[0031] ~~According to claim 2~~ For example, in one embodiment of the present invention the sleeve may be ~~formed three dimensionally to be~~ rolled up and the rolled up shape of the

sleeve can be maintained even if the clothing is constructed [[by]] from soft cloth which does not maintain its shape easily.~~is hardly to retain its shape.~~

~~—{0013}—~~

[0032] According to claim 3, In another embodiment of the present invention the shape retentive wire is made out of ceramic wire, wherein the ceramic wire does not rust, is not spoiled by washing, and [[are]] is bendable. Furthermore, the ceramic wire hardly becomes brittle even if the wires are bent ~~bended~~ repetitively. Accordingly, the ceramic wire is more advantageous than metal wire.

~~—{0014}—~~

[0033] According to claim 4, In another embodiment of the present invention the end of the shape retentive wire attached to the clothing is prevented from piercing cloth and projecting outside the clothing by means of covering the ends of the wire by a cylindrical member.

~~—{The Best Mode of Embodiment of the Invention}—~~

~~—{0015}—~~

~~Next, an embodiment of the present invention will be explained.~~

~~Fig. 1 is a drawing of a necked shirt as clothing concerning to an embodiment of the present invention. Fig. 2 is a drawing of the arrangement of wires attached to the necked shirt. Fig. 3 is a drawing of a T-shirt as the clothing concerning to an embodiment of the present invention. Fig. 4 is a drawing of the arrangement of wires attached to the T-shirt.~~

~~Fig. 5 is a drawing of the construction of a border line.~~

~~Fig. 6 is a drawing of the wire. Fig. 7 is a drawing of an embodiment of attaching the wire to the clothing. Fig. 8 is a drawing of the wire attached to the clothing.~~

~~Fig. 9 is a drawing of a neck to which the wire is attached. Fig. 10 is a drawing of a pocket to which the wire is attached. Fig. 11 is a drawing of a sleeve to which the wire is attached.~~

~~Fig. 12 is a drawing of trousers as the clothing concerning to an embodiment of the present invention.~~

~~[0016]~~

[0034] A shape retentive dress according to the present invention can be made ~~and kept~~ to keep its shape without spoiling the feel of cloth constituting the dress even though the cloth is soft cloth which has difficulty keeping ~~is difficult to keep~~ its three-dimensional shape, such as knit.

[0035] In Fig. 1, a knit shirt 10 is shown as an example of the shape retentive dress according to the present invention. The shirt 10 is necked. Sleeves 12 are sutured to a body 11 of the shirt 10. A neck 13, a pocket 15 and a flap 15a are sutured to the body 11. In addition, as shown in Fig. 3, a knit T-shirt 40 having no neck also can be made shape retentive.

~~[0017]~~

[0036] ~~The shape~~ Shape retentive dress of the present invention is not limited to [[a]] shirts, and the present invention also can be applied to a broad variety of clothing, including but not limited to trousers or [[a]] jackets. The construction of the shape retentive dress according to the present invention can be applied to an accessory, such as a muffler, a scarf or shoes, so as to

make a shape retentive accessory.

[0037] A dress material constituting the dress is not limited to knit, and another material may be used.

~~[0018]~~

[0038] As shown in Figs. 1 and 3, the shirt 10 or 40 is constructed by striped knit.

~~As shown in Fig. 5, the striped design is not formed by changing color of yarn used for weaving the cloth. The striped design is formed three dimensionally by suturing main cloths 17 and sub cloths 16 which are at least two types (designs and colors) of cloths.~~

~~Each of the sub cloths 16 whose width is slightly wider than the width of the striped design is sutured to the reverse side of the main cloths 17 between two main cloths 17. Ends 17a of each of the main cloths 17 are not stitched and only cut, and are exposed to the obverse side of the dress. Because of the characteristic of knit, the ends 17a of the main cloth 17 curl up to the obverse side, whereby cubic lines are formed at the lateral border lines of the striped design.~~

~~[0019]~~

[0039] Wires 20, which are transformable and able to maintain ~~maintainable~~ their shapes, are attached to suitable positions of the shirt 10 so as to obtain shape retention ~~retentivity~~, that is, to change the three-dimensional shape of the dress freely and to keep the desired changed shape in place.

[0040] As shown in Figs. 2 and 4 for example, with regard to the necked shirt 10, the wires 20 are attached to the neck 13, a neck hole (an opening of the neck) 14, the lower portions

of the sleeves 12, the lower portion of the body 11, the edge of the pocket 15 and the edge of the flap 15a. With regard to the T-shirt 40, the wires 20 are attached to the lower portions of the sleeves 12 and the lower portion of the body 11.

~~—{0020}—~~

[0041] A metal wire, a resin wire, a ceramic wire or the like can be used as each of the wires 20. In this embodiment, ceramic wires are used. The ceramic wires don't rust, are not spoiled by washing, and are bendable. Furthermore, the brittleness of the ceramic wires remains minimal ~~is hardly to be reduced~~ even if the wires are ~~transformed~~ bent continuously. Accordingly, the ceramic wires are more advantageous than metal wires.

[0042] As shown in Fig. 6, both ends 20a of each of the wires 20 are turned up. The turned parts are inserted into and fixed to resin tubes 21 respectively by hot welding. Accordingly, the ends of wires 20 attached to the cloths constituting the dress are prevented from piercing the cloths and projecting outside the cloth.

~~—{0021}—~~

[0043] The wires 20 are attached to the reverse side of the dress so as not to be exposed.

[0044] For example, as shown in Fig. 7, each of the wires 20 is inserted into a pipe formed by suturing a separate cloth 19 to the reverse side of the main cloths 17 so as to attach the wires 20 to the dress.

[0045] With regard to this embodiment, as shown in Fig. 8, the separate cloth 19 is attached to the reverse side of each of the sub cloths 16 so as to form a pipe by the separate cloth

19 and the sub cloth 16, and then the wire 20 is inserted into the pipe, thereby attaching the wires 20 to the dress.

~~—{0022}—~~

[0046] In addition, the wires 20 are not fixed to or weaved into the dress. The wires are attached to the dress movably within a small allowable range. That is because the dress is formed by elastic cloth, such as knit. Accordingly, unnatural contraction and creases are prevented from being generated by the expansion and contraction of the knit at the part to which the wires 20 are attached.

However, the attachment of the wires 20 is not limited thereto. The wires may be attached to the dress movably within a small allowable range by fastening some parts of the wire 20. Alternatively, it may be constructed that the edge of the main cloth 17 is turned up and the wire 20 is inserted into the turned part.

~~—{0023}—~~

[0047] In the vicinity of the neck 13 of the shirt 10, as shown in Fig. 9 (a), the wires 20 are attached to the peripheral edges of the neck 13 and the neck hole 14. Accordingly, as shown in Fig. 9 (b), the neck 13 is kept turned up. The shirt collar may be formed three-dimensionally and kept in the desired shape. For example, a part of the neck 13 may be bent or the neck hole 14 may be waved.

~~—{0024}—~~

[0048] At the pocket 15 of the shirt 10, as shown in Fig. 10 (a), the wires 20 are attached

to the peripheral edges of the opening of the pocket 15 and the flap 15a. Accordingly, as shown in Fig. 10 (b), the pocket 15 may be embossed on the body 11 and formed three-dimensionally. The flap 15a may be formed three-dimensionally to be turned up. The shape of the pocket 15 or the flap 15a can be maintained.

~~—{0025}—~~

[0049] At each of the sleeves 12 of the shirt 10, as shown in Fig. 11 (a), the plural wires 20 are attached to the lower portion of the sleeve 12 passing over the longer direction of the sleeve. These wires 20 are circular along the peripheral direction of the sleeve. Plural wires may be attached along the peripheral direction of the sleeve. However, it is desirable to attach a circular wire along the shape of the sleeve. Accordingly, as shown in Fig. 11 (b), the sleeve 12 may be formed three-dimensionally to be rolled up. The shape of the sleeve 12 can be maintained.

~~—{0026}—~~

[0050] In addition, with regard to a pair of trousers 25 as a shape retentive dress, as shown in Fig. 12 (a), plural circular wires 20 are attached to the cuffs of the trousers 25. Accordingly, as shown in Fig. 12 (b), the trousers 25 constructed by soft cloth such as knit may be ~~formed three dimensionally to be~~ rolled up. The desired shape of the trousers 25 can be maintained.

~~—{0027}—~~

[0051] As was previously ~~the above~~ mentioned, by attaching the wires 20 to [[the]] a

dress, the dress can be formed to assume a three-dimensional shape ~~three dimensionally~~ and kept in the shape even if the dress is constructed ~~[[by]]~~ from soft cloth which otherwise has difficulty ~~is hardly to retaining~~ its shape. Furthermore, in the present invention there is no need to perform any treatment, such as starching, ~~is not performed~~ on the surface of the cloth, whereby the feeling of the cloth is not spoiled.

[0052] Moreover, the shape retainability ~~retentivity~~ of the wires 20 is not changed with the passage of time so that the three-dimensional shape of the dress is maintained indefinitely. If the dress gets out of shape once, the wires 20 can be formed again easily so as to form a desired shape ~~fine state~~ without requiring any special apparatus, tool or chemical ~~medicine~~.

~~—[0028]—~~

~~In Fig. 13, a fabric (knit or the like) shirt 10 is shown as an example of a product comprising cloth of cutout design. However, products to which the cloth of cutout design is adopted is not limited to shirts, trousers, jackets and another dress, and is widely applicable to cloth products such as mufflers, scarves, shoes and another accessories. As shown in Fig. 13, striped design is formed on the shirt 10. As shown in Fig. 14, the striped design of the shirt 10 is not formed by printing or changing color of yarn of cloth but is formed by plural cutout patterns 30. The cutout patterns 30 are formed three dimensionally by suturing the main cloths 17 and the sub cloths 16 which are at least two types (designs and colors) of cloths.~~

~~{0029}~~

~~Each of the sub cloths 16 whose width is slightly wider than the width of the striped design is sutured to the reverse side of the main cloths 17. The sub cloth 16 appears through a cut opening 32 between the main cloths 17. The ends 17a of each of the main cloths 17, formed by forming the cut opening 32 between the main cloths 17, are not stitched and only cut, and are exposed to the obverse side of the cloth. The ends 17a of the main cloth 17 curl up and appear to the obverse side, whereby cubic lines are formed at the lateral border lines of the striped design. The curls of the ends 17a of the main cloth 17 are artless so that the border line between the main cloth 17 and the sub cloth 16 on the obverse side of the cloth is not straight but waved.~~

~~{0030}~~

~~The cloth material of the main cloths 17 is knit and may be sheeting, rib stitch, purl stitch, pin tuck, Rahben stitch, racked stitch, half cardigan rib stitch, full cardigan rib stitch, allow stitch, Jacquard stitch, lace, intarsia, plating, napping or the like.~~

~~In addition, the cloth material of the sub cloths 16 is not limited to knit, and may be woven cloth or non woven cloth. By making the cloth material of the main cloths 17 differ from that of the sub cloths 16, the cutout patterns 30 can be formed whose cloths are differ from each other in not only colors and designs but also texture.~~

~~{0031}~~

~~Next, explanation will be given on the method for forming the cutout pattern on cloth according to a flow chart in Fig. 15.~~

Firstly, as shown in Fig. 16 (a), the sub cloth 16 is sutured to the reverse side of the main cloth 17 (S11). By sewing the perimeter of the cut opening 32 which will be formed on the main cloth 17, the sub cloth 16 is sutured to the main cloth 17, whereby stitches 31 appearing on the obverse side of the cloth 17 are formed. A thread of the same color as the main cloth 17 may be used. Alternatively, a thread of different color from the main cloth 17 may be used so as to form decoration stitches 31.

In addition, in the case of providing the cutout patterns 30 on the shirt 10 shown in Fig. 13, the construction cloth of the shirt shaped as the shirt 10 is considered as the cloth 17, and the sub cloths 16 are sutured to the reverse side of the construction cloth.

~~—[0032]—~~

Next, if later discussed fixing stitches 31a are not formed in the cutout patterns 30 (S12), the cut opening 32 is formed on the main cloth 17 by incising the main cloth 17 or cutting a part of the main cloth 17 away as shown in Fig. 16 (b) (S13).

At the time of forming the cut opening 32, a fixed width (hereinafter, referred to as “curl up margin”) of the main cloth 17 remains between a cut edge 17a of the main cloth 17 generated by the cut opening 32 and the stitch 31. Namely, the part of the main cloth 17 is cut away while leaving the curl up margin of the main cloth 17 from the stitch 31 so as to form the cut opening 32, whereby the stitch 31 is positioned outer from the perimeter of the cut opening 32 (the cut edge 17a of the main cloth 17) for the curl up margin.

The cut edge 17a of the main cloth 17 is only cut and not treated for preventing the fray (for

example, stitching or gluing). The cut edge 17a of the main cloth 17 is shrunk (S15) so as to form the cutout patterns 30 on the cloth.

~~—{0033}—~~

~~As the above mentioned, the cut edge 17a of the main cloth 17 generated by forming the cut opening 32 on the main cloth 17 is not stitched and only cut. Accordingly, by forming the cut opening 32 and shrinking the cut edge 17a of the main cloth 17, the part of the main cloth 17 between the stitch 31 and the cut edge 17a (the curl up margin of the main cloth 17) curls up to the obverse side of the cloth as shown in Fig. 16 (b). The curl of the cut edge 17a is not processed compulsorily and is generated according to the characteristics of the cloth so that the curl is artless, whereby the border line between the main cloth 17 and the sub cloth 16 on the obverse side of the cloth is not straight but waved.~~

~~—{0034}—~~

~~Accordingly, the curl of the cut edge 17a of the main cloth 17 constitutes a decoration which makes the cutout patterns 30 individual and novel so as to make the cloth of the cutout patterns 30 loose. It is not necessary to treat the cut edge 17a for preventing the fray, whereby number of the working processes is reduced and the work becomes easy.~~

~~In addition, with regard to the curl up margin, it is preferable to adjust the area of the cut opening 32 corresponding to the cutout patterns 30. It is preferable to make the curl up margin in the same cutout pattern 30 substantially uniform. By making the curl up margin substantially uniform, the volume of the curl of the cut edge 17a of the main cloth 17 becomes substantially~~

uniform, whereby the design becomes nice to look at.

~~—{0035}—~~

~~For example, in the case of providing the cutout patterns 30 on the shirt 10 shown in Fig. 13, a straight incision is formed at each of the parts of the main cloth 17 surrounded by the stitches 31 so as to form the cut opening 32. In the case that the width of the stripe is large, each of the parts of the main cloth 17 surrounded by the stitches 31 is cut away while leaving the curl up margin of the main cloth 17 from the stitch 31 so as to form the cut opening 32.~~

~~—{0036}—~~

~~With regard to the cutout patterns 30 formed as the above mentioned, the main cloth 17 is adopted as a construction cloth of a thing from which a finished product is made by providing a decoration (in the shirt 10 shown in Fig. 13, the thing constructing the form of the shirt). Accordingly, as shown in Fig. 17 for example, with regard to a shirt on which a picture is printed, a striped design which divides the picture is formed at the part of the picture of the shirt by the cutout patterns 30. Instead of printing a part of the picture on each of the parts between the stripes of the striped design, the picture is divided by the cubic stripes, whereby the picture and the striped design coexist conspicuously in the same area.~~

~~As shown in Fig. 18 for example, it is easy to form the cutout patterns 30 passing through a seam between the sleeve and the body of the shirt. In this case, as shown in Fig. 19 (a), the main cloth 17 is adopted as a construction cloth constructing the form of the shirt. The sub cloth 16 is sutured to the sleeve 12 and the body 11 continuously, and the stitch 31 is provided around the~~

~~cut opening 32 to be formed. Then, as shown in Fig. 19 (b), the part of the main cloth surrounded by the stitch 31 is cut away while leaving the curl up margin of the main cloth 17 from the stitch 31 so as to form the cut opening 32, and the cut edge 17a is shrunk. Accordingly, the part of the main cloth 17 between the stitch 31 and the cut edge 17a leaved as the curl up margin curls up to the obverse side so as to form the cutout pattern 30.~~

~~In addition, the design formed by the cutout patterns 30 is not limited to the continuous line design. As shown in Fig. 20 for example, the cutout pattern 30 may be constructed by divided lines.~~

~~—{0037}—~~

~~Explanation will be given on the method for forming the cutout patterns 30 in this case on cloth according to a flow chart in Fig. 15. Firstly, as shown in Fig. 21 (a), the sub cloth 16 is sutured to the reverse side of the main cloth 17 (S11).~~

~~Next, as shown in Fig. 21 (b), the fixing stitch 31a is formed in each of areas surrounded by the stitches 31 (S14). In this embodiment, the fixing stitches 31a are X like shaped. However, the fixing stitches 31a may be polygonal, circular or dot like shaped.~~

~~Finally, as shown in Fig. 21 (c), the part of the main cloth 17 surrounded by the stitch 31 and the fixing stitches 31a is cut away while leaving the curl up margin of the main cloth 17 from the stitch 31 so as to form the cut opening 32 (S13). The cut opening 32 is formed accordingly, and then the cut edge 17a is shrunk (S15). Accordingly, the part of the main cloth 17 between the stitch 31 and the cut edge 17a curls up to the obverse side so as to form the cutout pattern 30.~~

~~In addition, the design formed by the cutout patterns 30 is not limited to the line design. As shown in Fig. 22 for example, the cutout pattern 30 may be wedge-like cross-shaped.~~

~~In this case, as shown in Fig. 23 (a), the sub cloth 16 is sutured to the reverse side of the main cloth 17, and then the stitch 31 is provided around the cut opening 32 to be formed. Subsequently, as shown in Fig. 23 (b), the part of the main cloth 17 surrounded by the stitch 31 is cut away while leaving the curl up margin of the main cloth 17 from the stitch 31 so as to form the cut opening 32. Presently, the part of the main cloth 17 between the stitch 31 and the cut edge 17a of the cut opening 32 curls up to the obverse side so as to form the wedge-like cross shaped cutout pattern 30. For example, the cutout pattern 30 may be polygonal, circular, heart-like, clover or the like.~~

~~—[0038]—~~

~~By the above mentioned method for forming the cutout pattern, the cutout pattern 30 with free shape can be formed easily on cloth.~~

~~With regard to the cutout pattern 30 formed as the above, the sub cloth 16 appears through the cut opening 32 formed on the main cloth 17, and the cubic line is formed at the peripheral edge of the cut opening 32 by the curl of the curl up margin remained between the cut edge 17a of the main cloth 17 and the stitch 31. Namely, the cutout pattern 30 is formed by the border line between the main cloth 17 and the sub cloth 16 and the cubic line formed on the border line. The cubic line formed on the border line is curved and artless so that the main cloth 17 and the sub cloth 16 are felt not to be divided straight but to be switched curvedly gradually, whereby the~~

design is felt looser.

~~—{0039}—~~

~~Now, conventionally, with regard to a dress formed by woven cloth such as a jean, there is well known a dress design that the cut edge of cloth is not stitched and is exposed to the obverse of the cloth so as to use the fraying edge as a decoration. With regard to a dress formed by fabric such as a T shirt, there is well known a dress design that sutured parts in the underarm, sleeve or the like is exposed to the obverse so as to use the rolling edge as a decoration.~~

~~These dress designs using the edge as a decoration looks loosely and achieve wide acceptance by the young mainly.~~

~~—{0040}—~~

~~Conventionally, there is well known a decorative art that a part of a cloth is cut away and another cloth is exposed through the cut part.~~

~~For example, the Japanese Utility Model Laid Open Gazette Hei. 5-60314 discloses a method to expose another cloth through the opening of the cut cloth for constructing a cubic design on the cloth. In this method, the opening for forming the cubic design is provided on a sheet body (cloth or the like). A design chip on which the design is provided and filled with filler so as to be uneven cubically is stuck on the reverse side of the opening, whereby the design chip with three-dimensional shape appears through the opening of the sheet body.~~

~~—{0041}—~~

~~The Japanese Utility Model Laid Open Gazette Hei. 5-60314 expresses the effect that the edge~~

~~of the opening of the sheet body is covered by the puff of the design chip and is not exposed though the design chip is attached to the reverse side of the sheet body, whereby the design becomes nice to look at. Namely, the cut edge of the cloth on the edge of the opening does not function as a decoration and exists only as a border line between the cloths.~~

~~—{0042}—~~

~~Accordingly, as the above mentioned, by using the method for forming the cutout pattern comprising the process of forming the stitch surrounding the part to be cut away by suturing the sub cloth to the reverse side of the main cloth and the process of cutting the main cloth surrounded by the stitch while remaining the fixed roll up margin from the stitch, the cutout pattern with free shape can be formed easily on cloth. With regard to the formed cutout pattern, the sub cloth appears to the obverse side of the cloth through the cut opening formed on the main cloth, and the cubic line is formed at the peripheral edge of the cut opening by the curl of the curl up margin of the main cloth. Furthermore, it is not necessary to treat the cut edge of the main cloth for preventing the fray, whereby number of the working processes is reduced and the work becomes easy.~~

~~—{0043}—~~

~~By constructing the main cloth from fabric and constructing the sub cloth from fabric, woven cloth or non woven cloth, the curl up margin of the main cloth curls up so as to form the cubic line. The cubic line formed on the border line is curved and artless. The main cloth is construction cloth of a thing from which a finished product is made by providing a decoration.~~

~~Accordingly, the cutout pattern can be formed which divides a picture provided on the cloth.~~
~~Furthermore, it is easy to form the continuous cutout pattern on the sutured part of the dress'or~~
~~the like.~~

~~—{0044}—~~

~~The cloth with the cutout pattern comprises the cut opening formed on the main cloth, the~~
~~stitch provided outer from the perimeter of the cut opening for the fixed curl up margin, the sub~~
~~cloth appearing through the cut opening, and the curl of the curl up margin. Accordingly, the~~
~~curl of the cut edge of the main cloth constitutes a decoration which makes the cutout pattern~~
~~individual and novel so as to make the cloth of the cutout pattern loose. By constructing the~~
~~main cloth from fabric and constructing the sub cloth from fabric, woven cloth or non woven~~
~~cloth, the cubic line formed by the curl of the remained curl up margin of the main cloth is~~
~~curved and artless, thereby being loose.~~

~~—{Brief Description of the Drawings}—~~

~~—{0045}—~~

~~—{Fig. 1}—~~

~~It is a drawing of a necked shirt as a dress concerning to an embodiment of the present~~
~~invention.~~

~~—{Fig. 2}—~~

~~It is a drawing of the arrangement of wires attached to the necked shirt.~~

~~—{Fig. 3}—~~

~~It is a drawing of a T shirt as the dress concerning to an embodiment of the present invention.~~

~~—{Fig. 4}—~~

~~It is a drawing of the arrangement of wires attached to the T shirt.~~

~~—{Fig. 5}—~~

~~It is a drawing of the construction of a border line.~~

~~—{Fig. 6}—~~

~~It is a drawing of the wire.~~

~~—{Fig. 7}—~~

~~It is a drawing of an embodiment of attaching the wire to the dress.~~

~~—{Fig. 8}—~~

~~It is a drawing of the wire attached to the dress.~~

~~—{Fig. 9}—~~

~~It is a drawing of a neck to which the wire is attached.~~

~~—{Fig. 10}—~~

~~It is a drawing of a pocket to which the wire is attached.~~

~~—{Fig. 11}—~~

~~It is a drawing of a sleeve to which the wire is attached.~~

~~—{Fig. 12}—~~

~~It is a drawing of trousers as the dress concerning to an embodiment of the present invention.~~

~~—【Fig. 13】—~~

~~It is a drawing of the shirt on which cutout patterns are formed.~~

~~—【Fig. 14】—~~

~~It is a macrograph of the cutout pattern.~~

~~—【Fig. 15】—~~

~~It is a flow chart of the method for forming the cutout pattern.~~

~~—【Fig. 16】—~~

~~It is a drawing explaining the method for forming the cutout pattern.~~

~~—【Fig. 17】—~~

~~It is a drawing of the shirt on which the cutout patterns dividing a picture are formed.~~

~~—【Fig. 18】—~~

~~It is a drawing of the cutout patterns formed over the sleeves and the body.~~

~~—【Fig. 19】—~~

~~It is a drawing explaining the method for forming the cutout pattern over the sleeves and the~~
~~body.~~

~~—【Fig. 20】—~~

~~It is a drawing of the cutout patterns each of which is formed to be divided lines.~~

~~—【Fig. 21】—~~

~~It is a drawing explaining the method for forming the cutout pattern formed to be divided~~
~~lines.~~

~~—[Fig. 22]—~~

~~It is a drawing of the cross shaped cutout pattern.~~

~~—[Fig. 23]—~~

~~It is a drawing explaining the method for forming the cross shaped cutout pattern.~~

~~—[Description of Notations]—~~

~~—[0046]—~~

~~10—a shirt~~

~~11—a body~~

~~12—a sleeve~~

~~13—a neck~~

~~14—a neck hole~~

~~15—a pocket~~

~~20—a wire~~

~~21—a tube~~

ABSTRACT OF THE DISCLOSURE

The present invention relates to a structure for forming and maintaining the three-dimensional shape of clothing. Specifically, the present invention teaches methods for manufacturing of clothing whose three-dimensional shape can be changed freely and kept in place securely even if the clothing is constructed from soft material such as knit. In one embodiment of the present invention a flexible and shape retentive member is attached to the clothing.